MIL-M-38510/27(USAF)
AMENDMENT 3
17 June 1976
SUPERSEDING
AMENDMENT 2
27 March 1974

MILITARY SPECIFICATION

MICROCIRCUITS, DIGITAL, TTL, LOW-POWER, MULTIPLE NOR GATES, MONOLITHIC SILICON

This amendment forms a part of Military Specification MIL-M-38510/27(USAF), dated 21 August 1972.

PAGE 1

* 1.2, Delete (including example of part number) and substitute:

"1.2 Part number. The complete part number shall be in accordance with MIL-M-385 $\overline{10.1}$ "

PAGE 3

TABLE I, $t_{\rm phi.}$ test, maximum limits column: Delete "80" and substitute "99".

TABLE I, $t_{\rm PLH}$ test, maximum limits column: Delete "80" and substitute "90".

PAGE 4

FIGURE 3, schematic circuit: Add "circuit A" after device type 01; add new circuit (B) as shown on page 3 of this amendment.

PAGE 5

FIGURE 4, burn-in and life test circuit: Delete "R2, R5 = 2.43 K Ω " and substitute "R2 through R5 = 2.43 K Ω ".

PAGE 6

FIGURE 5, switching time test circuit for device type 01: Delete and substitute new figure 5 as shown on page 4 of this amendment.

PAGE 7

- * TABLE II, test requirement column: Delete "Groups B and C end point electrical parameters (Method 5005)" and substitute "Groups C and D end point electrical parameters (Method 5005)".
- * 4.2, second sentence: Delete "A, B, and C" and substitute "A, B, C, and D".

 Delete third sentence.
- * 4.3: Delete subparagraphs (a), (b), (c), (e), and (g).

PAGE 8

- * 4.4.1, first sentence: Delete "consist of the test subgroups and LTPD values shown in" and substitute "be in accordance with".
- * 4.4.2, delete and substitute:
 - "Group B inspection. Group B inspection shall be in accordance with table II of Method 5005 of MIL-STD-883."
- * 4.4.3: Delete title "Group C inspection" and substitute "Groups C and D inspections".

 Delete first sentence and substitute "Groups C and D inspections shall be in accordance with tables III and IV of Method 5005 of MIL-STD-883 and as follows:"

 Subparagraph (b): Delete "Subgroups 7 and 8" and substitute "Subgroups 3 and 4".

 Delete subparagraphs (c), (d), and (f).

PAGE 9

TABLE III, test no. 25, column 4A: Add "GND".

PAGE 10

* TABLE III, tests 33 thru 40, maximum limits column: Delete "0.18 mA" and substitute "-180 μA ".

Tests 43 thru 46, maximum limits column: Delete "46" and substitute "66".

Tests 47 thru 50, maximum limits column: Delete "46" and substitute "60".

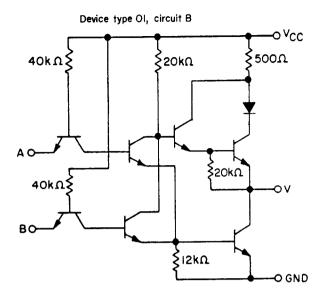
Tests 51 thru 54, maximum limits column: Delete "80" and substitute "99".

Tests 55 thru 58, maximum limits column: Delete "80" and substitute "90".

PAGE 11

6.5, logistic support: Delete and substitute:

"6.5 <u>Logistic support.</u> Lead materials and finishes (see 3.3), are interchangeable. Unless otherwise specified, microcircuits procured for Government logistic support will be procured to device class B (see 1.2.2), and lead material and finish C (see 3.3). Longer length leads and lead forming shall not affect the part number."



NOTE: Component values shown are nominal.

FIGURE 3. Schematic circuit.

NOTE: The margins of this amendment are marked with an asterisk to indicate where changes from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

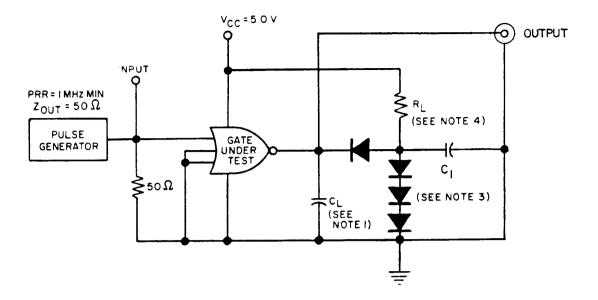
Custodian: Air Force - 17

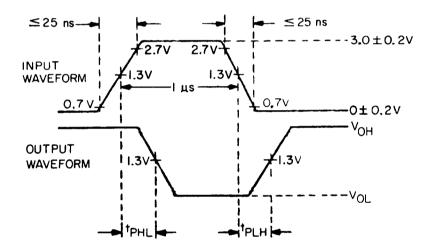
Review activities: Air Force - 11, 99 DSA - ES

User activity: Air Force - 19 Preparing activity: Air Force - 17

Agent: DSA - ES

(Project 5962-F213)





NOTES:

- 1. C_L = 50 pF minimum including scope probe, wiring, and stray capacitance, without package in test fixture.
 Voltage measurements are to be made with respect to network ground terminal.

- 3. All diodes are 1N3064 or equivalent. 4. R_L = 4 k Ω ±5%, C_1 = 30 pF minimum.

FIGURE 5. Switching time test circuit for device type 01.